

426/522

RELATING

TO THE

Evolutionary Advance

IN THE

DAIRY INDUSTRY

Effected

Thru the Robinswood Farms Methods
of Securing Sanitary Certainty in

MILK, CREAM & BUTTER

*An advance that is of great practical,
sanitary and commercial importance*

The Outcome of 40 Years Research, Experimentation and
Invention at Robinswood Farms, Gilmanton,
New Hampshire

A statement that should be of great interest to every
person engaged in the production and distribution
of milk, cream and butter as well as of
all consumers of these dairy foods

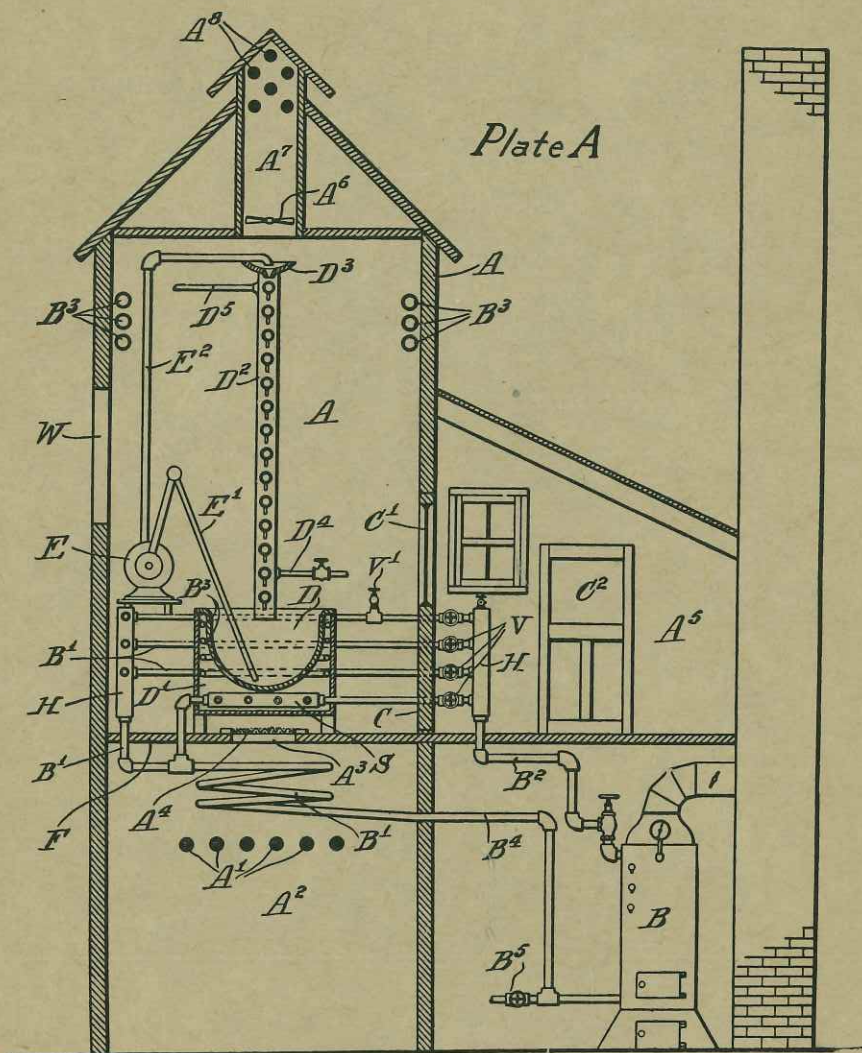


Published by the

PAN-AMERICAN DAIRY COMPANY

Home Office

EAST ORANGE, N. J.



Robinswood Farms Apparatus specially designed for aerating and pasteurizing milk in a germ-free atmosphere of any required temperature.

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Important Notice

The patent-protected methods and apparatus controlled by The Pan-American Dairy Company, if applied in any community either by an individual concern or by a merger of concerns, should secure paramount control of the Milk, Cream, Butter, Ice Cream and Dairy Foods' trade in that community.

To understand such a claim will require study relating to the scientific basis and inventive advances that have been accomplished at Robinswood Farms, Gilmanton, New Hampshire. In securing desired information, first read carefully the following pages.

RELATING TO Securing Sanitary Certainty OF CHARACTER IN *Milk, Cream and Butter*

Farm-Applied Adequate Temperature-Control of Milk and Cream the Most Important Basic Principle Required

Dairy experts who have deeply studied the sanitary character of milk, cream and butter know that such character in those products is not as good as is desirable. But very few understand as yet, that it is a comparatively simple and easy matter to secure unlimited quantities of such foods having character that can be claimed to be entirely safe and of absolutely highest edible character; and that the advanced methods and apparatus required to secure such character, have been evolved at Robinswood Farms, Gilmanton, New Hampshire, during the first 25 years of the present century, as to which accomplishment attention is invited.

This new requirement in dairy practice was evolved at Robinswood Farms, a 700-acre dairy farm located on a White Mountain foothill top 1,000 feet above sea-level, adjacent to the 200-year old village of Gilmanton, N. H. This accomplishment grew out of a perception that no really good milk, cream or butter was being publicly sold and distributed because of the incubations of dairy-product infections which occur between the time of producing milk and cream up to the time of their further treatment at central plants, including their pasteurization and churning. Robinswood Farms which was primarily only occupied as a summer residence by its owner, has been largely devoted during the 25 years of the present century to experimental farming and dairy research work by Dr. J. M. W. Kitchen, the owner of the estate.

It was at this farm that were discovered the important facts that unusually deep mechanically produced refrigerative influence must be applied to milk and cream at the farm immediately after the production of the milk or cream, and before either the milk or cream lose their self preservative character; and also the need of mechanical, exhaustively complete aeration be given milk and cream.

Furthermore, it was at this farm that the discovery was made that the cause of winter off-flavor in butter is due to ferment gases that are mostly produced in the glands of the warm hides of cows. It took over 10 years of experimental, inventive work to meet and overcome that cause, and to evolve the methods and apparatus needed to produce market milk and cream as well as butter of the highest sanitary and edible character.

Further on in these pages a brief general idea will be stated as to the nature of the Robinswood Farms' advances in dairying, which information can be followed up by further information secured from The Pan-American Dairy Company by those specially interested in the subject.

Inasmuch as the general consuming public is already much interested in securing highest sanitary character in dairy foods, and is willing to pay a considerable advance in the cost of such foods, it will be obvious that the related matters herein written should be of paramount interest to all producers and sellers of dairy products.

Causes of Defects in Character of Milk, Cream and Butter

1st. The inevitable infections that always more or less occur in the production of milk, and which are impossible of complete prevention.

2nd. The incubation of such infections and the consequent formation in milk and cream of the excretory matters which always are produced in the metabolic activity of growths of all cells, and especially if the infections are large.

3rd. The presence of decomposition products (the so-called protein-split-products) which always are produced in the senile death of, or destruction of bacteria by heating or otherwise. Such decomposition products are more or less virulently poisonous according to the amount of such contaminations present in dairy products.

4th. All milk is contaminated with the gases that contaminate the atmosphere surrounding cows, are inbreathed by them and appear in milk as it is secreted in the udder. Most of such putrid ill-smelling gaseous fumes are produced in the glands of the warm hides of cows. They are specially present in closed cow-barn atmospheres during the winter.

5th. Cows' milk is generally inadequately aerated, and usually becomes infected by atmospherically borne germs during ordinary processes of aeration and cooling of milk.

6th. During the process of mechanical separation of cream, the bacterial infections in milk become concentrated in the separated cream. Unless destroyed by pasteurization they become more or less transferred to butter made from the cream.

7th. The temperatures at which milk and cream are held during their transportation and holding, are not sufficiently low to prevent the slow incubation of the infections. Only temperatures that are considerably lower than ice-water temperature are sufficiently intense; and if the time of holding is as long as usual, only temperatures below the freezing temperature of water, are adequate in preserving milk.

8th. The temperatures of the atmosphere to which containers of milk and cream are generally exposed, are frequently of incubative degrees. This is commonly the case at loading and unloading railroad stations and during distribution to consumers during the warmer months.

Causes Specially Producing Defects in Butter

Besides those causes which produce defective market milk and cream, there are some which are particularly potent in pro-

ducing poor butter, among which should be mentioned: (A) Acid and putrid ferment products in cream that usually in the past have been difficult or impossible to remove; (B) Germ-infected wash water; (C) Atmospherically contaminated infections conveyed to butter in its working, placing it in shipping tubs, printing, and packaging; (D) Inadequate low enough temperature applied immediately after churning, and during transportation and holding; (E) Neglecting to pasteurize cream before its churning; (F) Neglecting an exhaustive aeration of cream before its churning; (G) All expert butter makers know that the best butter cannot be made from sour cream because of the clots which adhere to the butter fat during churning and washing; (H) The possible presence of specific diseased germs should be remembered, especially those of tuberculosis as well as of typhoid fever. There is a very large amount of tuberculously infected butter still being consumed by human beings, that would kill guinea pigs in three days if fed to them.

It should be noted that the mere existence of desirable taste and smell in butter is not assurance that it is safe to consume. So far as is known, the presence in butter of the germs of tuberculosis, typhoid and other fevers, putrid sore throat, and various other specific germs, do not affect the smell or taste of butter that is held at cold temperatures. Butter that has delicious smell and taste may be virulently poisonous from specific infections and decomposition products.

Pasteurization the Only Practical Way of Securing Full Sanitary Character in Dairy Products

Milk, cream and butter that can be known to be assuredly safe, must have been subjected to pasteurization or other equally effective method of destroying living germs in milk and cream; or in butter that is melted after it is made. So far as the writer knows, there is no other way in which assured sanitary character in milk, cream and butter can be secured than through the methods

that have been evolved at Robinswood Farms. These methods have been protected by patent so that working monopolies can be placed in the hands of selected producers, and to distributors who will thus become enabled to educate consumers to know what constitutes sanitary character in dairy products, and make money in so doing.

What are the Robinswood Farms' Methods and Apparatus for Producing Sanitary Character in Milk, Cream and Butter?

Besides adopting all practices that have been generally known to be practical in the way of producing reasonable cleanliness in the production of milk, the special advanced methods which have been evolved at Robinswood Farms are:

1st. Reducing the temperature of milk or cream at the farm and before they lose their antiseptic power, to a non-fermentative temperature of such low degree that fermentation will not occur in the milk or cream before they have been pasteurized.

2nd. A sufficiently exhaustive aeration of milk or cream, and as a fact butter if necessary, must be given to secure complete elimination of objectionable smells or taste in milk, cream or butter that may be due to gaseous fumes that have been inhaled by cows, absorbed into their blood, and transferred to milk in its production in the udder, or that may be otherwise produced inside or outside of cows' bodies. Elimination of these gaseous, or other gaseous contaminations, should be effected as soon after the milk is produced as may be possible, and in any event, before incubations of the milk infections have commenced. This important effect is secured thru application of the Robinswood Farms' methods and apparatus.

3rd. Milk and cream should have their contaminating gases exhaustively eliminated *before* pasteurization, or during the primary heating given in the pasteurizing process.

The usual method of aeration while cooling milk is not sufficiently effective. In the ordinary methods of partially cooling

milk by one gravitation of milk over a cooling surface, sufficient time is not given to effect the transfusion of the contaminating gases into the aerating atmosphere. Furthermore, there is not time enough given to effect sufficient refrigeration of the milk in the one gravitation system. All of such and other defects are overcome by the Robinswood Farms' methods and applied apparatus, which facts will be briefly explained in these pages.

Pasteurization is not only a matter of securing safety from accidental dangerous infections that occasionally and frequently do occur in even the most carefully conducted milk producing plants. Pasteurization also has a preservative action by destroying germs that if not destroyed, will incubate and effect damage to milk, cream and butter.

It is emphasized that all of these defects are overcome by the Robinswood Farms' methods and applied special apparatus.

The charges that sometimes have been made against pasteurization are unwarranted if that process is rightly practiced. There are wrong ways as well as right ways to pasteurize. But it always should be done before fermentation commences in milk or cream. Low temperature pasteurization with long holding, is the right way, while rapid contact with scalding hot surface is wrong. In the Robinswood Farms' way, no contact with too hot heating surfaces is permitted; and quick cooling after the heating is effected. It is granted that if milk is *entirely* right in *every* other way, it may be slightly more digestible than heated milk; but on the other hand, there is no definite proof in existence that pasteurization of *good* milk destroys enzymes and vitamins. If it does, the nutritive loss is so slight as to be negligible, and can be easily made good thru small doses of orange or tomato juices, or cod liver oil emulsion.

4th. The Robinswood Farms' methods comprise the practice of conducting all of the treatment of milk, cream and butter in atmospheres substantially free from dust and bacteria.

5th. In butter making, the Robinswood Farms' method molds newly churned butter into one pound print-blocks, and quickly and deeply chills the blocks on moistened butter boards. Then each

block is enwrapped in parchment paper and packed in square transporting cases, which packed cases are then so deeply refrigerated, that not only is there none of the fermentation that usually occurs in slowly cooled tubbed butter; but also, the butter reaches the cold storage plants in an undamaged condition where such treated butter can then be held for indefinitely long periods without damaging change, such butter being free from acids, incubative bacteria, and putrefactive bacterial products.

6th. The printing of the butter is effected in practically dust-and-bacteria-free air; and is cut into quarter-pound bars in the Robinswood Farms' butter cutter without contact of bare hands. (See special description of this butter-cutter. It is unique of its kind and works perfectly).

7th. There are several Robinswood Farms' useful devices of special value for aerating and cooling milk, and for processing butter. Also, the only perfected market-milk-bottle-closure. There is even a new babies' milk bottle. There are special apparatus for aerating large amounts of cream coincidentally with its pasteurization, as well as for pasteurizing large quantities of milk. For descriptions of these, consult the specific patents and illustrative schematic drawings that will be found in several separate publications.

To fully understand the Robinswood Farms' methods and apparatus, study is necessary of the over 20 patents issued and pending that pertain to the Robinswood Farms' inventions; also, reading of various educational publications issued by The Pan-American Dairy Company, which company controls all the special patents, they having been placed for commercialization with that company.

The Robinswood Farms' methods are simple, and easily and economically applied. They may be seemingly only slight variations from prior methods; but they are based on new scientific data. They require the use of specific new apparatus which when applied, accomplish better and hitherto unaccomplished results, which to secure calls for special new scientific and practical knowledge.

The requirement of preventing all incubations of all infections from the time of production of milk up to the time of delivery of milk products to consumers, calls for: (A) Mechanically produced deep refrigeration at the farm; (B) The refrigerative influence should be applied before milk or cream lose their natural power to inhibit growths of infecting bacteria; (C) Refrigerating influence must be sufficiently deep and so accumulated in the milk or cream as to prevent bacterial growths prior to pasteurization; (D) Preferably, pasteurization should be applied to the milk rather than to cream to secure the most desirable texture in butter; (E) Milk or cream must be exhaustively aerated before they receive pasteurizing heat; (F) The product being pasteurized must not be brought into contact with heating surfaces of a temperature higher than 160° F.; (G) In cooling the product it should not be brought into contact with surfaces that will freeze the product during that contact; (H) A relay series of refrigerations must be effected when necessary, and especially at shipping and receiving railroad stations, and before distribution to consumers; (I) The product should be protected against damaging atmospheric heat during its distribution; (J) Milk and cream should be distributed in containers having the Robinswood Farms' Quick-Lock closure, which is the only perfected milk bottle closure; (K) All operations in the treatment of milk and cream products should be in atmospheres from which dust and bacteria have been eliminated.

Past Day Methods, or Producing Gilt-Edge Dollar a Pound Butter

The rationale of the Robinswood Farms' methods will be made more clear by referring back to the old time method of producing dollar-a-pound, gilt-edge butter, so called.

More than fifty years ago a few individuals made a specialty of making a quality of butter which in that day was sold for one dollar a pound. It was given the name of "gilt edge." That was in the days before the compound microscope was discovered and the scientific world became enabled to see the various types of bacteria that are the cause of specific diseases. That was the day

in which multi-millions of poor babies were poisoned to death with bottle-fed milk.

In that day milk was "set" in shallow pans in a clean, cool place, and allowed to "rise," and undergo lactic acid fermentation for a considerable time. In those dairies, the various operations were conducted in a cleanly manner by expert butter makers. Under that system the cream automatically underwent effective aeration. The cream was hand skimmed. After its churning the butter, which immediately after its churning usually had delicious smell and taste, was molded into prints and sent to market in iced shipping containers. Such butter tasted delicious and smelled good for a limited time. But it was more or less infected, contaminated with incubated infections and was only relatively good butter. It may have been decidedly poisonous, according to the character of the persons producing the milk, the character of the infections of the milk, and those which atmospherically infected the cream in its rising and holding. In that day nothing was known of dairy bacteriology. It was known that bottle-fed babies died in millions; but it was not known why, or why babies' mothers died from medically conveyed puerperal septicemia. It was probably the writer who was the first to suspect the real cause of the babies' deaths. Later on, the mechanical separation of cream from milk became practiced, as well as churning of cream at central creameries. Then followed the farm hand-separator and a world-wide reduction in the cost of producing butter. But along with that reduction in cost, came an increase in the growth of germs in cream in holding cream at the farm, and during its conveyance to the creamery, with consequent putrid flavor and large bacterial content in creamery produced butter, with dangerous accumulation of ferment products in the butter. Following that situation it was discovered by Pasteur that it was bacteria that caused disease in wine, as well as in animals. That discovery led to understanding why milk became sour. Pasteurization was first adopted to prevent milk from becoming sour. Now it is also generally practiced to destroy infecting milk-borne disease-producing bacteria. Over 700 American cities now have obtainable supplies of pasteurized milk.

At this stage of the world's progress, Robinswood Farms took a hand in the game at the beginning of the present century in investigating the actual cause of the death of bottle-fed babies. Also the clean-milk movement started under the leadership of the late Dr. Henry L. Coit, of Newark, N. J. This was followed by the establishment of certified milk plants, some of which are still in existence, but which are gradually failing because of the expense of producing clean enough milk; and also, because "certified" milk is not assuredly safe; and is otherwise defective. (See the brochure "Why Certified Milk is Not Good Enough"). Robinswood Farms has now completed 25 years of successful research, experimental and testing work. Other experiments were effected at Michigan University, and reported in 1913 by Prof. Victor C. Vaughan and Sons in their book "Protein Split Products in Relation to Immunity and Disease." Their findings have been endorsed by other laboratories. The surgeons in the great war discovered that if dead fermenting tissues were cut away from the wounded soldiers, they did not die of shock. Still other accumulated knowledge has been acquired relating to the poisonous character of putrefactive and ferment products. In 1910 Robinswood Farms had discovered that freshly churned butter would have to be immediately given deep non-fermentative mechanical refrigeration to secure and preserve its delicious character as to smell and taste. The writer's patent No. 1,026,918, was issued May 21, 1912. Other patents have been since issued, including Nos. 1,072,238; 1,125,692; 1,125,693; 1,127,778; 1,141,553; 1,207,933; 1,127,778; 1,224,649; 1,178,808; 1,447,249; 1,230,091; 1,447,250; 1,447,251; 1,447,252, and 1,567,274. Applications Ser. Nos. 540,870; 605,272; 605,273; 605,115; 709,739; 775,573; 178,511, and 227,240, have also been filed. Canadian patent No. 254,391 has been issued, which covers the most important basic features of the Robinswood Farms' methods and apparatus. Serial No. 605,115 is allowed and will issue coincidentally with this publication.

Some Latest Evolved Robinswood Farms' Apparatus

The schematic drawings on pages 14 and 15 illustrate some of the latest developed apparatus evolved at Robinswood Farms. In those drawings Fig. 1 represents a steam and electric-current generating plant in which A is an apartment containing the furnace P and boiler Q. J is a steam conduit. T is a large turbine. N is a closable milk and cream heating apartment. C are milk or cream containers. M is a steam valve. U is an outlet for vapors and fumes. S are steam tuyeres. K is a wooden grating.

Fig. 2 represents a farm refrigerating tank connected by an electric conduit E with the plant indicated in Fig. 1. This tank contains an antiseptic non-congealed refrigerating fluid. G are weighted covers having skirt-portions for the cans C, C. D is a refrigerating device of any known character, motored by the electric current, or by gasoline engine. O is a thermometer. I is insulating material. F controls the electric current.

Figs. 3 and 4 are cross and longitudinal sections of the preferred Robinswood Farms' aerator and pasteurizer, and Fig. 5 is a vertical view of a farm refrigerating tank in which H1 is a lid. F and F1 pertain to a refrigerating compressor. G is refrigerating fluid and G1 are refrigerating piping. F2 is a heat radiating coil. B1 is an aerating rotor. B2 are perforated aerating dippers. A1 is the tank-jacket. C is a metal cream tank. D is the water level in the jacket which is heated by steam injected thru the pipes E. D2 is an ice cooling space. It also contains refrigerating piping D3, and the steam main E. B3 is a shaft revolving handle that can be replaced by a pulley.

This apparatus can be used with advantage for aerating and pasteurizing moderate amounts of cream and milk. (See other forms in separate prints showing apparatus for treating large amounts of milk and cream.)

The apparatus indicated in Figs. 3 and 4 will be found specially valuable to use in connection with small sized creameries or on large farms or neighborhood small creameries where the pro-

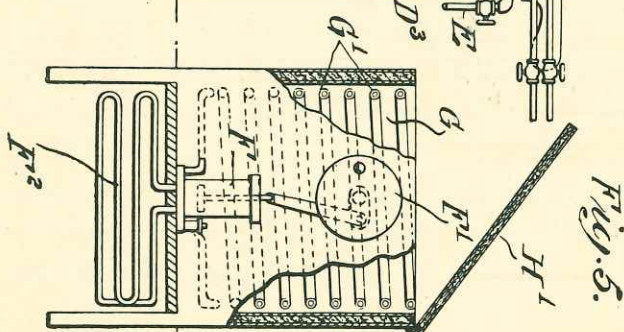
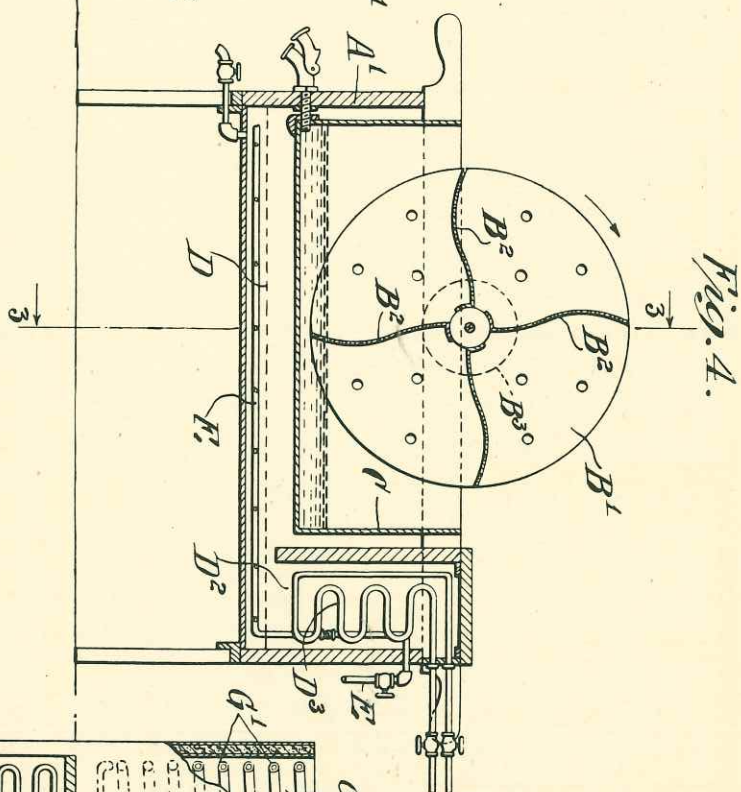
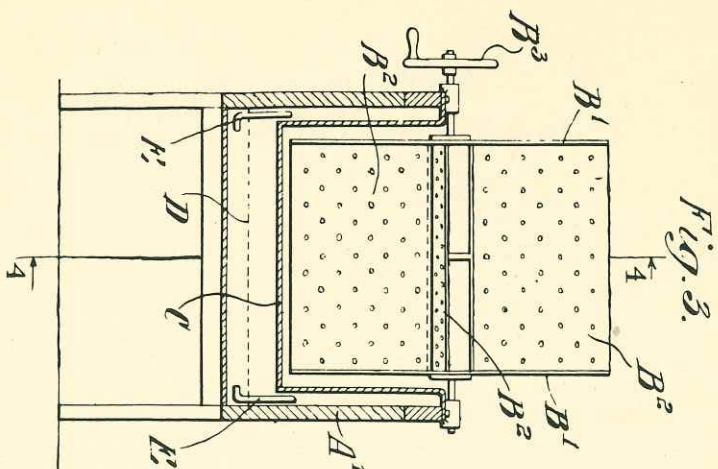


Fig. 1.

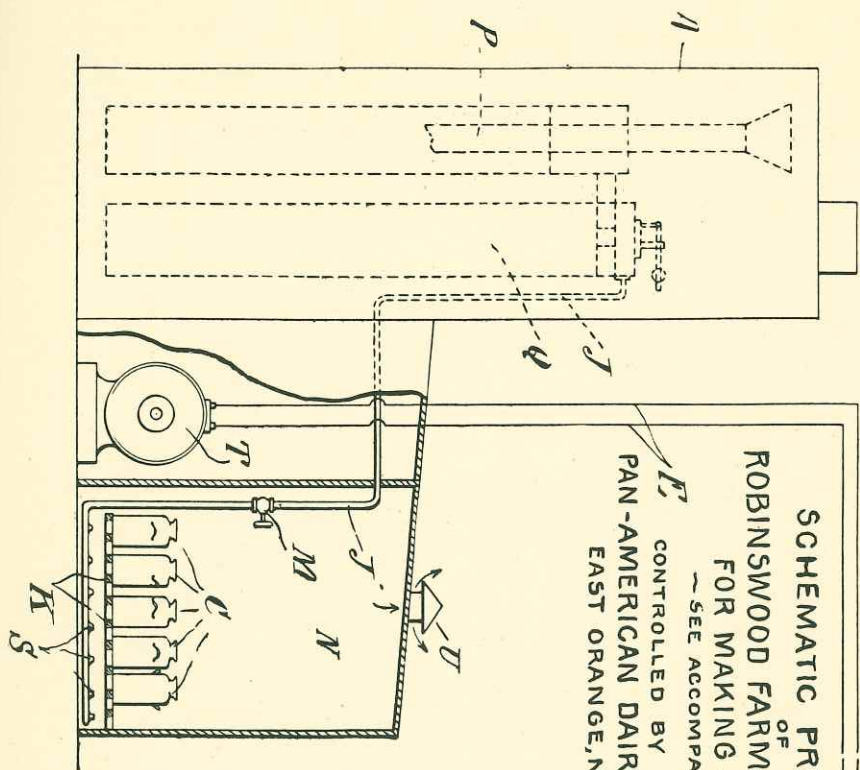
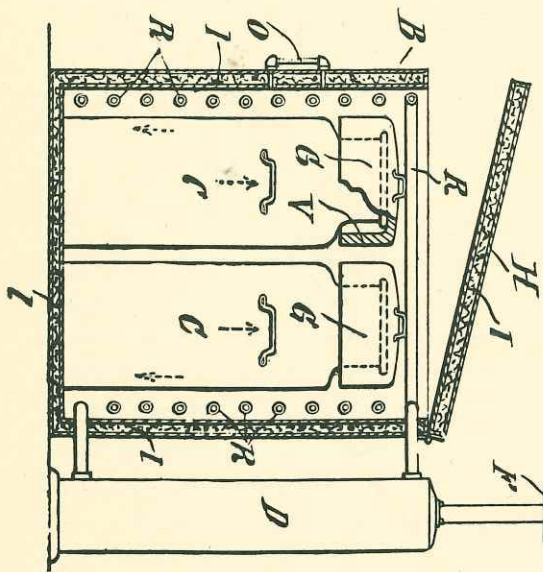


Fig. 2.

SCHEMATIC PRESENTATION
OF
ROBINSWOOD FARMS' METHOD AND APPARATUS
FOR MAKING SANITARY BUTTER
— SEE ACCOMPANYING DESCRIPTION —
CONTROLLED BY
PAN-AMERICAN DAIRY COMPANY
EAST ORANGE, N.J.
PATENTS PENDING



duction of dollar a pound butter is undertaken, or where moderate or small amounts of milk are to be incidentally aerated and pasteurized. With this apparatus, a few revolutions of the rotor B1 eliminates practically all bad smells, odors and acids in cream or milk during the pasteurizing heating of the cream or milk, which result is effected by the contact of warm water-vapor of a temperature considerably lower than 200° F., the vapor being produced by injecting steam of under 10 lb. pressure, introduced thru the pipes E. Where abundant cold well water is available, the cream can be reduced to churning temperature by running the well water thru the jacket A1, more or less accentuated by the refrigerating coil D2.

Special printed matter is prepared that further describes all of the Robinswood Farms' apparatus, which will be sent to those properly interested.

In seeking information, it is asked that inquiry will be made in connection with statements as to the standing and objective purposes of the inquiring individuals or firms.

A patent that will be controlled by this company, which has been allowed, will be issued coincident with this publication and others about to issue, contain full statements of the methods and apparatus that have been evolved at Robinswood Farms for securing edible excellence as well as sanitary certainty in milk, cream and butter. On request, the numbers of special patents will be forwarded to properly interested persons.

Properly advertised, Robinswood Farms' butter can be sold at retail for \$1.00 a pound. Ordinary fermented sour cream treated in the apparatus herein illustrated, produces butter that tastes and smells so much like newly churned sweet-cream-butter, that it is difficult for even an expert to detect the difference. Fermented-cream-butter made in accordance with the new process, has all of the selling value of the old-time \$1.00 a pound butter, but also has absolute sanitary certainty of character. Cream treated by the Robinswood Farms' method, for domestic use or ice cream manufacture, has a hitherto unknown edibly excellent, sanitary and hygienic character.

Encouragement of the Individual Dairy Farmer Essential to General Prosperity

The constructive work that has been in progress at Robinswood Farms for 25 years prior to the writing of these pages, was undertaken because it was plainly seen that if the fertility that has been robbed from the soil of the older sections of the United States was ever to be reconstituted, it would have to largely be thru the use of the dairy cow under the personal management of the individual farmer, and largely thru the action of those intelligent farmers who could be so specially educated in the science as well as advanced art in dairying as would be financially profitable. It is generally understood that successful agriculture is the basis of prosperity in any country, and that the ability to secure at least a comfortable living by the farmer is essential. It is on the farm that are bred the leaders in all other pursuits, and it is only thru the financial well being of the farmer that any successful system of agriculture can be expected to be maintained.

Machine farming has largely eliminated the individual farmer in growing cereals on machine cultivatable lands, and many farmers have become impoverished on that account and have dropped out from the ranks of farmers. But the increase in industrial pursuits, means that more consumers of farm grown products of all kinds, including milk, cream and butter of a high sanitary character, can to be expected to create a widespread demand. There is no individual food of such widespread value as the product of the dairy cow if its sanitary character is unquestioned. But on the other hand, there is no other food that may be so dangerous to humanity as the innocent looking white milk of the dairy cow, and its associated products. These statements are known facts; and in these pages true statements have been made as to the actual sanitary condition of the general public supplies of milk, cream and butter. Coincident with such statements, has been pointed out briefly in these pages how all these defective characters in milk and milk products can be prevented or remedied.

It may be of interest to here state that out of the advanced developments that have occurred at Robinswood Farms, a con-

siderable number of foods has been produced in which milk and its products are constituent parts in proper proportion to other food constituents. Information in regard to such advances will be forwarded on request.

What the Pan-American Company can do for the Dairy World

This company has undertaken to commercialize the Robinswood Farms' methods and apparatus. The company is a subsidiary of the Torridoor Corporation, that also controls some 50 patents relating to fuel conservation, and thru which development the fuel-cost of power generation will be largely reduced; so much so in fact, that it is clear that the electric current will be so much lowered in cost that the current will be largely carried to dairy farms and be there applied among other uses in refrigerating milk, cream and even butter under the plan that originated at Robinswood Farms.

It will be seen that these improvements can be utilized over so enormous a field that there is nothing else for the Pan-American Dairy Company to do than to sell local rights to use the methods; and to sell apparatus for carrying out the methods. Such apparatus will include the Robinswood Farms' Quick Lock milk bottle. So far as possible, our company will sell rights to mergers of competing companies, so that in a measure the loss which now has to be sustained by consumers, owing to interweaving of routes, will be more or less obviated. If this is not possible, the rights will be sold to one concern or to one individual in each community.

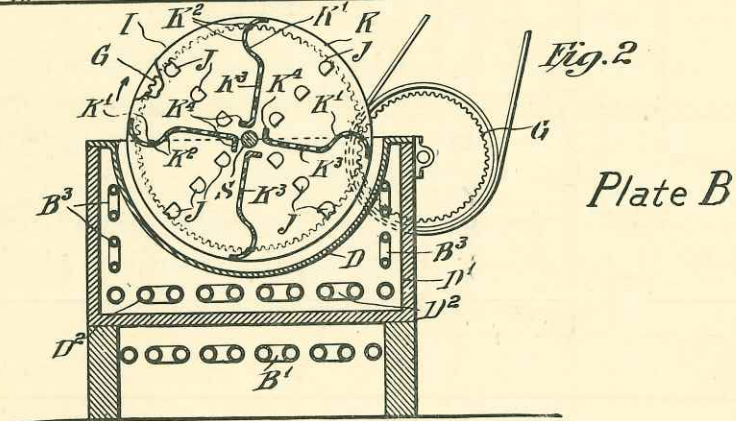
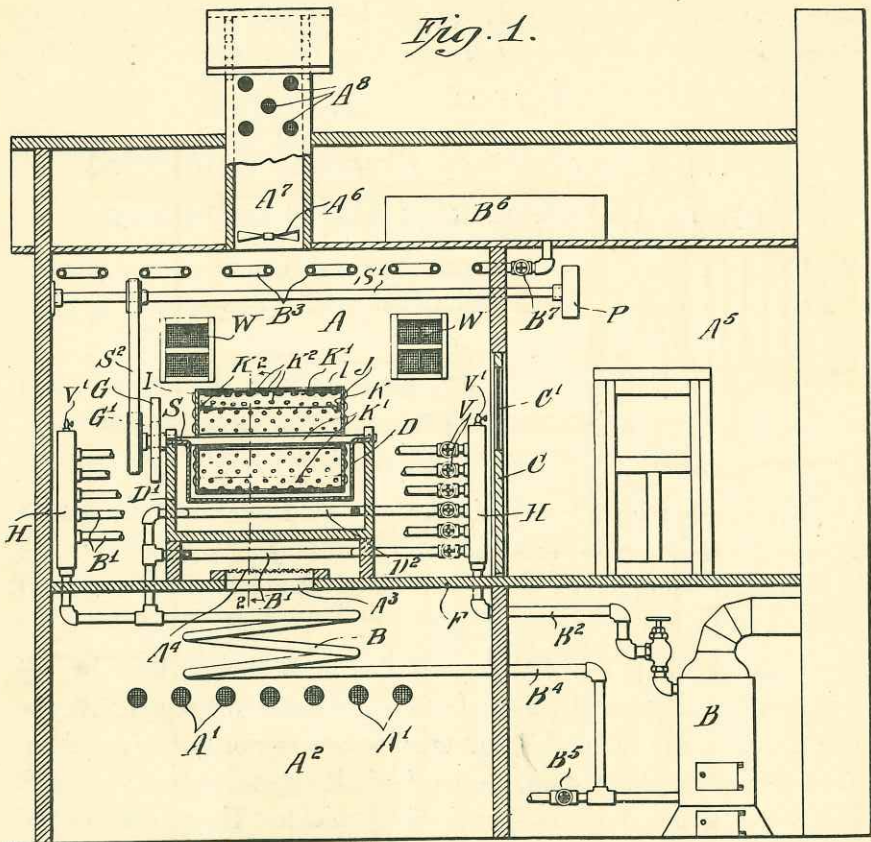
It is the aim of the Pan-American Dairy Company to establish a subsidiary company to be known as Robinswood Farms, Inc., the object of which subsidiary company will be finding a profitable market for butter of the superior character of the Robinswood Farms' product. This product will be advertised generally under the trade name of "Sanicertan," thru which co-operation, individual producers of that quality of butter will be able to find the de-

sired profitable market. It should be noted that Canada has granted patent protective rights covering milk, cream and butter of the "Sanicertan" character.

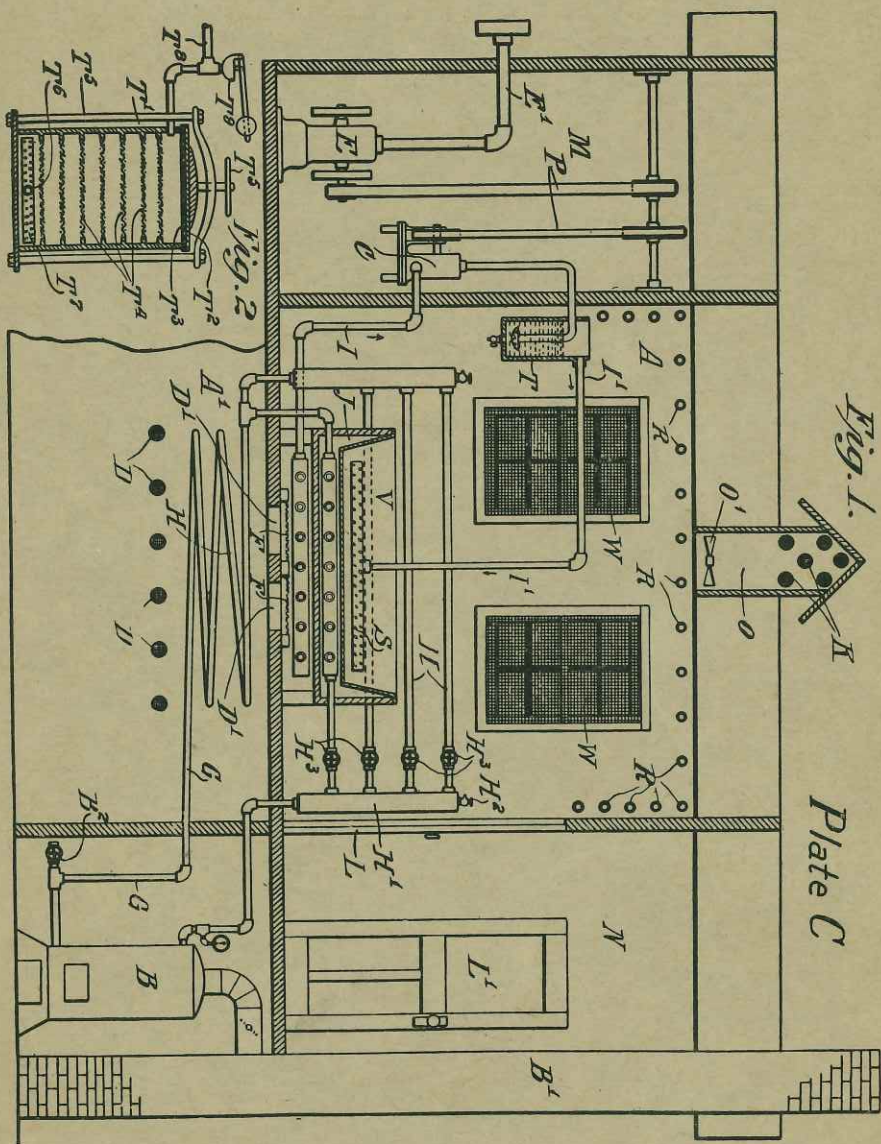
Partial List of Dairy Products Controlled by the Pan-American Dairy Company

1. The Sanicertan (trade marked) Food Products, comprising compositions of cereals and dried milk. (See special printed circular).
2. Robinswood Farms' Supra-Certified Milk that is better than ordinary "certified." It can be produced in unlimited quantities at relatively the same cost as really good Grade A milk.
3. Robinswood Farms' Sweet Cream "Gilt Edge" Butter, that is unique in being the only absolutely sanitary butter. Better worth dollar a pound than any other butter that has ever been sold at that price.
4. Robinswood Farms' Fermented Cream Butter. Made by the Robinswood Farms' method of continuous or repeated cyclic aeration and coincident pasteurization, is not only free from all barn or cowy fumes, but has had all excess acids oxygenized. Better than any butter previously made. There are several types of Robinswood Farms' fermented butters.
5. There are various other valuable products in the way of Infants' Prepared Dried and Canned Milks, as well as methods for eliminating bacteria with carbon monoxide gas; and summer drinks composed of oxygenized skim milk.

For all further information address The Pan-American Dairy Company, East Orange, New Jersey, at which convenient suburb of New York City, the Home Office of the company will be located.



Robinswood Farms Apparatus specially intended for the aeration and pasteurization of cream or milk in plants of moderate size.

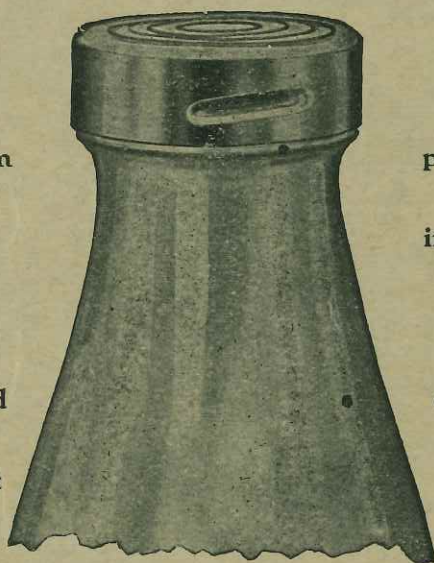


*Robinswood Farms Apparatus specially intended for aerating cream
Economically more suitable to use in large butter making plants.*

The Ideal
Sanitary Milk Container
The Robinswood Farm
Quick Lock Milk Bottle

Protected by Method and Apparatus Patents

Inexpensive
Simple in Form
Convenient
in Use
Easily Cleaned
High Efficient



Completely
protects against
infections both
the contents
of bottle and
Exterior of Lip

The best, and only satisfactory bottle for Pasteurizing in the bottle.
Also, the best distributing container for raw milk
and cream, or milk pasteurizing in bulk.

Pan-American Dairy Company
Sole Owners and Distributors
East Orange, N. J., U. S. A.